HistoricBridges.org - National Bridge Inventory Data Sheet

2010 Inventory

The National Bridge Inventory contains data submitted by state transportion departments to the Federal Highway Administration in coded format.
Form Interface Design: www.historicbridges.org. Data Conversion Assistance By www.bridgehunter.com. None of the involved parties make any guarantee of accuracy.

Basic Information

Michigan [26]	Berrien County [021]	Bertrand [07920]	0.8 MI S OF NILES	41-48-03 = 41.800833	086-14-53 = -86.248056

11111101000S013	Highway agency district: 5	Owner: State Highway Agency [01]	Maintenance responsibility: State Highway Agency [01]		
Route: 12		US-12 EB	Toll: On free road [3]	Features intersected: M-51	

Design - main	Steel [3]	Design - approach		Kilometerpoint	3983.6 km = 2469.8 mi
3	Stringer/Multi-beam or girder [02]	0	Other [00]	Year built: 1955	Year reconstructed: N/A [0000]
				Skew angle: 0	Structure Flared:
				Historical significance	Bridge is not eligible for the NRHP. [5]

Total length	47.8 m = 156.8 ft	Length of maximum span	24 m = 78.7 ft	Deck width, out-to-out	11.8 m = 38.7 ft	Bridge roadway width, curb-to-curb	10.1 m = 33.1 ft
Inventory Route, Total Horizontal Clearance	10.1 m = 33.1 ft	Curb or sidewalk width - left	0 m = 0.0 ft	Curb or sidewalk width - right	0 m = 0.0 ft		

Deck structure type	Concrete Cast-in-Place [1]
Type of wearing surface	Monolithic Concrete (concurrently placed with structural deck) [1]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	52.7 metric ton = 58.0 tons	
0 km = 0.0 mi	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	87.9 metric ton = 96.7 tons	
	Bridge posting	Equal to or above legal loads [5]	Design Load	MS 18 / HS 20 [5]	

Functional Details

Average Daily Traffic	6404	Average daily truck traffi	9 %	Year	2007	Future average daily traffic	11300
Year	2018						
Road classification	Other Principal Arterial (Urban) [14]	Lanes on structure	2	Approach roadway width	9.8 m = 32.2 ft		
Type of service on bridge	Highway [1]	Direction of traffic	1 - way traffic [1]	Bridge median			
Parallel structure designation	The right structure of parallel bridges carrying the roadway in the direction of the inventory. [R]						
Type of service under bridge	Highway, with or without ped	Lanes under structure	5	Navigation control	Not applicable, no waterway. [N]		
Navigation vertical clearanc	0 = N/A	Navigation horizontal clearance	0 = N/A				
Minimum navigation vertical clearance, vertical lift bridge		Minimum vertical clearance over bridge roadway	99.99 m = 328.1 ft				
Minimum lateral underclearance reference feature	Highway beneath structure [H]						
Minimum lateral underclearance on right	0 = N/A	Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	4.29 m = 14.1 ft	Minimum vertical underclearance reference feature	Highway beneath structure [H]				
Appraisal ratings - underclearances	Basically intolerable requiring high priority of corrrective action [3]						

Repair and Replacement Plans

Type of work to be performed

Bridge deck replacement with only incidental widening. [37]

Work done by	Work to be done by contract [1]		
Bridge improvement cost	233000	Roadway improvement cost	6000
Length of structure improvement	47.9 m = 157.2 ft	Total project cost	70000
Year of improvement cost estimate			
Border bridge - state		Border bridge - percent responsibility of other state	
Border bridge - structure number			

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Equal to present minimum criteria [6]
Condition ratings - superstructur	Satisfactory [6]	Appraisal ratings - roadway alignment	Equal to present desirable criteria [8]
Condition ratings - substructure	Satisfactory [6]	Appraisal ratings - deck geometry	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - deck	Fair [5]		
Scour	Bridge not over waterway. [N]		
Channel and channel protection	Not applicable. [N]		
Appraisal ratings - water adequacy	N/A [N]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	94
Culverts	Not applicable. Used if structure is not a culvert. [N]		

Traffic safety features - railings	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - transitions	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail	Inpected feature meets currently acceptable standards. [1]
Traffic safety features - approach guardrail ends	Inpected feature meets currently acceptable standards. [1]

Inspection date	May 2008 [0508]	Designated inspection frequency	24	Months

Underwater inspection	Not needed [N]	Underwater inspection date	
Fracture critical inspection	Not needed [N]	Fracture critical inspection date	
Other special inspection	Not needed [N]	Other special inspection date	

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11111101000S014	Highway agency district: 5	Owner: State Highway Agency [01]	Maintenance responsibility: State Highway Agency [01]		
Route: 12		US-12 WB	Toll: On free road [3]	Features intersected: M-51	

Design - main	Steel [3]	Design - approach		Kilometerpoint	675.3 km = 418.7 mi
3	Stringer/Multi-beam or girder [02]	0	Other [00]	Year built: 1955	Year reconstructed: N/A [0000]
				Skew angle: 0	Structure Flared:
				Historical significance	Bridge is not eligible for the NRHP. [5]

Total length	47.8 m = 156.8 ft	Length of maximum span	24 m = 78.7 ft	Deck width, out-to-out	11.8 m = 38.7 ft	Bridge roadway width, curb-to-curb	10.1 m = 33.1 ft
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Deck structure type	Concrete Cast-in-Place [1]
Type of wearing surface	Monolithic Concrete (concurrently placed with structural deck) [1]
Deck protection	
Type of membrane/wearing surface	

Weight Limits

Bypass, detour length	Method to determine inventory rating	Load Factor(LF) [1]	Inventory rating	38.2 metric ton = 42.0 tons	
0 km = 0.0 mi	Method to determine operating rating	Load Factor(LF) [1]	Operating rating	52.7 metric ton = 58.0 tons	
	Bridge posting	Equal to or above legal loads [5]	Design Load	MS 18 / HS 20 [5]	

Functional Details

Average Daily Traffic	6404	Average daily truck traffi	9 %	Year	2007	Future average daily traffic	11300
Year	2018						
Road classification	Other Principal Arterial (Urban) [14]	Lanes on structure	2	Approach roadway width	9.8 m = 32.2 ft		
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Minimum lateral underclearance reference feature	Highway beneath structure [H]						
Minimum lateral underclearance on right	0 = N/A	Minimum lateral underclearance on left	0 = N/A				
Minimum Vertical Underclearance	4.57 m = 15.0 ft	Minimum vertical underclearance reference feature	Highway beneath structure [H]				
Appraisal ratings - underclearances	Basically intolerable requiring high priority of corrrective action [3]						

Repair and Replacement Plans

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Border bridge - structure number			

Inspection and Sufficiency

Structure status	Open, no restriction [A]	Appraisal ratings - structural	Equal to present minimum criteria [6]
Condition ratings - superstructur	Satisfactory [6]	Appraisal ratings - roadway alignment	Equal to present minimum criteria [6]
Condition ratings - substructure	Good [7]	Appraisal ratings - deck geometry	Somewhat better than minimum adequacy to tolerate being left in place as is [5]
Condition ratings - deck	Fair [5]		
Scour	Bridge not over waterway. [N]		
Channel and channel protection	Not applicable. [N]		
Appraisal ratings - water adequacy	N/A [N]	Status evaluation	Functionally obsolete [2]
Pier or abutment protection		Sufficiency rating	94
Culverts	Not applicable. Used if structure is not a culvert. [N]		

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